New Hampshire

Department of Agriculture,

Markets & Food

Yankee Spiders

Ву

John Weaver, Entomologist, Division of Plant Industry

Spiders are regarded often as little crawly things that give us the creeps. Truth be told, the vast majority of them are beneficial, both in respect to our economy and public health. Spiders feed mostly on insects and in doing so they play a significant role in controlling many of our crop pest and disease-carrying insects. I like to have a lot of them in my garden to control vegetable pests and even a few in my house during the mosquito season just to snag some of the little blood-sucking marauders that get inside. Spiders are also an important source of food for many birds, mammals, reptiles and fish. So on the whole, we are better off in this world with spiders than without them.

On the other hand, there are some negatives aspects about spiders. They eat beneficial insects that pollinate crops and other predators that eat crop pests. They get into houses where they like to do a lot of interior decorating, hanging their webs from the ceilings and driving fastidious housekeepers frantic. Sometimes they bite people and when they do, they usually inject venom that causes a varying degree of pain and trauma. The severity of the bite depends on the quality and quantity of venom injected into the victim and on the kind of spider involved. Usually the bite is no worse than a bee sting, but that is not always the case.

The two kinds of spiders that I receive the most questions about are the Black Widow and the Brown Recluse. The bite of a female Black Widow is toxic to humans but usually is not fatal (the fatality rate is less than 5%). Most fatalities occur in small children or the elderly. Victims experience painful abdominal cramps and facial muscle spasms. These symptoms usually go away in a couple of days. Last year, I received two Black Widows for identification (no victims involved). The reason why so few Black Widows are observed in New Hampshire is because they cannot survive our winters. The ones that are encountered here have been transported inadvertently from the warmer nether regions.

In the last ten years, there has been a slight increase in the observations of Black Widows in New Hampshire and there are two reasons for this phenomenon: First, more products are being shipped into the state (they like to build their webs in shipping pallets or hide in boxes); and second, more grapes are being grown in the United States with less pesticides and as a result, more grapes are being shipped with spiders. Farmers have learned that it is more economical to use natural enemies like spiders and insects to control pests in their vineyards than to use chemicals. This means that grapes will have fewer pesticide residues than they used to, but more critters. Grocery stores now take extra care in washing and inspecting grapes and intercept most of the spiders and bugs before the fruit is placed on the market shelves, but occasionally a spider turns up and rarely somebody gets bitten. So it's a good idea to inspect your grapes carefully before you handle them. I recommend that you wash them thoroughly in the sink, and if you find one, either squish it or, if you want someone to identify it, catch it in a jar.

The Brown Recluse is almost as infamous as the Black Widow. It has a venom that causes the skin and muscle tissue in the area of the bite to die -- very nasty looking indeed. However, the good news is that the Brown Recluse does not occur in New Hampshire. In the United States it occurs in the region of southern Ohio to Georgia and Texas to Nebraska, and unlike the Black Widow, the Brown Recluse is rarely transported outside of its natural range. An observation of a Brown Recluse in New Hampshire has never been confirmed by a reliable source. However, it is often falsely reported. There are over 300 different species of spiders in New Hampshire and most of them are brown and reclusive. False reports are made on such a regular basis that the Brown Recluse in the Northeast has become an urban legend.

The myth in itself has negative effects, as it causes unwarranted public alarm. It is not uncommon for such apprehension to lead some people to develop an irrational fear of spiders (*arachnophobia*) in which just the sight of a little spider can result in a state of panic. Others merely imagine that they have been bitten by a spider and have a relatively common psychological state called *delusory parasitosis*. One of the best ways to deal with this kind of fear is to know the facts, or as they say "know your enemy". So, I hope that a little bit (or bite) of the truth here about spiders will help put them in proper perspective.

For more information about this topic and others, contact the Division of Plant Industry, NH Dept. of Agriculture, Markets & Food, PO Box 2042, Concord, NH 03302-2042, tel. 271-2561.